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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BASIL KARANIKOS and FREDRICK ROSSI

Appeal 2009-003780
Application 10/658,925
Technology Center 1700

Decided: October 14, 2009

Before CHUNG K. PAK, KAREN M. HASTINGS, and
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

Appellants request rehearing of our Decision of July 24, 2009 (“Decision”) wherein we sustained the Examiner's § 103 rejections of claims 1 through 7, 9 through 17 and 19 through 44.

In sustaining the Examiner's 35 U.S.C. § 103 rejections above, we stated at pages 12-13 of the Decision:

Appellants do not dispute the Examiner's finding that *Sylvan teaches a coffee filter cartridge identical to the beverage filter cartridge recited in claims 1, 12, and 44*, except for the claimed pleats, flutes or corrugations on the side wall of the filter employed.

Sylvan specifically mentions employing a filter having a generally truncated cone shape or a truncated triangular prism (*identical or similar to a fan shape*) in its coffee filter cartridge. However, it is not limited to a filter having such a shape. It teaches that its filter can be in any predetermined shape *useful* for its coffee filter cartridge.

Spiteri teaches a filter having a predetermined shape, i.e., *a fan-shaped filter* comprising a side wall having folds and pleats (corresponding to the claimed pleats, flutes or corrugations on the side walls of filters) for a conventional coffee brewer. Spiteri teaches adding folds and pleats to the side wall of a fan-shaped filter useful for any conventional coffee brewers, inclusive of those taught by Sylvan. The pleated fan-shaped filter, according to Spiteri, requires adding an additional amount of the filter material (area) to a conventional fan shape filter. In other words, adding folds and pleats to the conventional fan-shaped filter provides a more effective filtering area (thus allowing a higher liquid flow rate as required by Sylvan). Appellants do not dispute that pleats and folds in a conventional filter enlarges or increases an effective filtering area.

Spiteri also teaches that the filter can be geometrically configured in size dimensions appropriate for the interior of conventional coffee brewers. Implicit in this teaching of Spiteri is that one of ordinary skill in the art can geometrically configure its filter to a desired size dimension appropriate for a given filter cartridge, including *the one required by Sylvan*. *Sylvan teaches that for its particular coffee filter cartridge, the filter employed must be configured to maintain a substantial space between the filter and the interior wall of the cartridge (even when the filter is wetted) for the purpose of enhancing a filtering rate.*

Further, Spiteri teaches that rigid properties can be added to a paper filter by means of folding and pleating the paper filter and when at least minimum of four folds are added, they act as a supporting member. *More importantly, however, Sylvan teaches that for its particular coffee brewer system, using an*

appropriate material in constructing its filter is important in imparting a desired rigidity. Specifically, Sylvan teaches using a material, such as a light-weight two-phase heat sealable paper of cellulosic and synthetic fibers, to make a totally self supporting filter which will not collapse or sag against the inner walls of the cartridge, when wet. [(Emphasis added.)]

Appellants contend at pages 1 through 4 of the Request for Rehearing that the Board erred in finding that:

1) Spiteri teaches employing a fluted or pleated filter (a fan shaped filter) in any conventional coffee brewers (Decision, FF 12);

2) “Sylvan is not limited to employing a filter having a generally truncated cone shape or a truncated triangular prism (identical or similar to a fan shape) in its coffee filter cartridge; it teaches that its filter can be in any predetermined shape *useful* for its coffee filter cartridge (col. 2, ll. 8-16 and col. 3, ll. 13-15)” (Decision, FF 5) (emphasis added); and

3) “Sylvan desires a filtering system useful for providing a high flow rate (col. 1, ll. 43-45)” (Decision FF. 4).

We have reviewed our Decision in light of these contentions presented by Appellants. However, we are not persuaded that our Decision contains any reversible or harmful error. We address each of Appellants’ contentions below.

First, contrary to Appellants’ contention, Spiteri does not teach that its filter is useful for only gravity-type drip brewing. Spiteri teaches at paragraph 0001 that:

[Its] invention relates to filtration devices, and more particularly to a home brewing by filtering product through a permeable porous paper [i.e., a filter,] capable of brewing a number of cups of infusing beverages.

Spiteri further teaches at paragraph 0021 that:

Referring now to the drawings and in particular to FIG. 1[,] [t]here is shown a top view of a partially folded filter generally designated 10. The filter of a fan shaped configuration, having a top opening 12, a bottom edge 14, a continuously formed arcuate edge 16, ... folds 18*a*, 18*b*, 18*c* and 18*d*.... The filter 10 is geometrically configured in size dimension and configuration to be received within the interior of a convention coffee brewer means such as an electric drip brewer.

Although Spiteri exemplifies an electric drip brewer, its teaching is not limited to drip brewer means. *See Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989)(*quoting In re Lamberti*, 545 F.2d 747, 750 (CCPA 1976))("The fact that a specific [embodiment] is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered."); *In re Fracalossi*, 681 F.2d 792, 794 n.1 (CCPA 1982)(A prior art reference's disclosure is not limited to its examples.). It broadly refers to a fan shaped filter useful for filtration devices in general and "conventional coffee brewer means" in particular. Consistent with such a broad disclosure, Spiteri further teaches that the filter can be geometrically configured in size dimension consistent with the configuration of the filter receiving interior of a conventional coffee brewer means. Accordingly, we find no error in our finding at page 12 of our Decision that "Spiteri teaches...any conventional coffee brewers, inclusive of those [conventional coffee brewers] taught by Sylvan." Appellants have not disputed that Sylvan's coffee brewers are conventional coffee brewers.

In any event, Appellants' argument does not identify any reversible or harmful error in the Decision. As is apparent from our analysis at pages 12 and 13 of the Decision, we found that Spiteri teaches adding folds and pleats

known for increasing an effective filtering area to a fan-shaped filter which is structurally similar to the shape of Sylvan's filter, e.g., a generally truncated cone shape or a truncated triangular prism. More importantly, as indicated at page 15 of the Decision,

Since Appellants do not dispute that the addition of flutes or pleats in a conventional filter is known to increase the effective filtering area, Sylvan's desire for a high flow rate would have led one of ordinary skill in the art to employ flutes or pleats in the side wall of the filter used in Sylvan's coffee filter cartridge.

Thus, even if Spiteri does not teach adding flutes or pleats to a filter useful for any conventional coffee brewers, one of ordinary skill in the art would have been lured to employ flutes or pleats known for increasing an effective filtering area on the side wall of the filter employed in Sylvan's beverage filter cartridge, motivated by a reasonable expectation of successfully increasing an effective filtering area for the purpose of obtaining a higher flow rate desired by Sylvan.

Second, Appellants correctly point out that column 2, lines 8-16, of Sylvan referred to in our finding states:

This invention features a beverage filter cartridge including an impermeable pierceable base having a predetermined shape and an opening at one end. There is a self-supporting wettable filter element disposed in the base sealingly engaged with the opening of the base and having a form different and smaller than the predetermined shape of the base so that the filter element diverges from the base and divides the base into two sealed chambers.

Moreover, as acknowledged by Appellants, Sylvan, at column 3, lines 13-15, discloses that “[t]he filter *can have* the shape of a cone, a truncated cone, or

a triangular prism which *fans out* and blends into a circular base” (emphasis added.). Consistent with the above description, we found at page 7 of the Decision that “Sylvan is not limited to employing a filter having a generally truncated cone shape or a truncated triangular prism (identical or similar to a fan shape) in its coffee filter cartridge; it teaches that its filter can be in any predetermined shape *useful* for its coffee filter cartridge” (emphasis added). In other words, any predetermined filter shape *useful* for Sylvan’s coffee filter cartridge is described as including those features discussed at column 2, lines 8 through 16, and column 3, lines 13 through 15, of Sylvan as is apparent from the Relevant Findings of Fact section located at pages 5 through 7 of the Decision. Moreover, as is apparent from our analysis at page 12 of the Decision, any *predetermined* filter shape *useful* for Sylvan’s coffee filter cartridge *requires, among other things*, that

the filter employed must be configured to maintain a substantial space between the filter and the interior wall of the cartridge (even when the filter is wetted) for the purpose of enhancing a filtering rate.

This requirement is consistent with the above description at column 2, lines 8-16 and column 3, lines 13 through 15 of Sylvan. In fact, such description is necessary to support our finding at page 12 of the Decision that Sylvan’s coffee filter cartridge is identical to the beverage filter cartridge recited in claims 1, 12, and 44, except for the claimed pleats, flutes or corrugations on the side wall of the filter employed. Thus, we find no error in our finding at page 7 of the Decision that “Sylvan... teaches that its filter can be in any predetermined shape *useful* for its coffee filter cartridge (*col. 2, ll. 8-16 and col. 3, ll. 13-15*)” (emphasis added).

Even if our finding is read in vacuum and is treated as an error, Appellants still have not identified any reversible or harmful error in the Decision. As stated at page 12 of the Decision:

Appellants do not dispute the Examiner's finding that Sylvan teaches a coffee filter cartridge identical to the beverage filter cartridge recited in claims 1, 12, and 44, except for the claimed pleats, flutes or corrugations on the side wall of the filter employed.

Sylvan specifically mentions employing a filter having a generally truncated cone shape or a truncated triangular prism (*identical or similar to a fan shape*) in its coffee filter cartridge. [(Emphasis added.)]

In addition, we found that Spiteri teaches adding folds and pleats known for increasing an effective filtering area to a fan-shaped filter which is structurally similar to the shape of Sylvan's filter, e.g., a generally truncated cone shape or a truncated triangular prism. More importantly, as indicated at page 15 of the Decision,

Since Appellants do not dispute that the addition of flutes or pleats in a conventional filter is known to increase the effective filtering area, Sylvan's desire for a high flow rate would have led one of ordinary skill in the art to employ flutes or pleats in the side wall of the filter used in Sylvan's coffee filter cartridge.

Thus, regardless of the status of the alleged error in our finding directed to the language “any predetermine [filter] shape useful for [Sylvan's] filter cartridge” at page 12 of the Decision, one of ordinary skill in the art would have been lured to employ flutes or pleats known for increasing an effective filtering area on the side wall of the filter employed

in Sylvan's beverage filter cartridge, motivated by a reasonable expectation of successfully increasing an effective filtering area for the purpose of obtaining a higher flow rate desired by Sylvan.

Finally, contrary to Appellants' contention, Sylvan teaches the desirability of increasing a liquid flow rate (a filtration rate). Sylvan, at column 1, lines 13 through 45, discusses a slow filtration rate as one of the shortcomings of conventional beverage or coffee brewers employing beverage filter cartridges and indicates one of its objects as obtaining a high flow rate (a high filtration rate). Thus, we find no reversible or harmful error in stating at page 15 of the Decision that:

Since Appellants do not dispute that the addition of flutes or pleats in a conventional filter is known to increase the effective filtering area, Sylvan's desire for a high flow rate would have led one of ordinary skill in the art to employ flutes or pleats in the side wall of the filter used in Sylvan's coffee filter cartridge.

In reaching this determination, we have considered Appellants' statement at page 4 of the Request for Rehearing provided below:

[O]ne of [ordinary] skill in the art would have understood that increasing the filter area and flow rate of a Sylvan cartridge would reduce the contact time between the brew water and the coffee, reducing the strength of the coffee beverage produced.

However, this admitted knowledge of one of ordinary skill in the art does not indicate that one of ordinary skill in the art would have been led away from employing flutes or pleats in the side wall of the filter used in Sylvan's coffee filter cartridge. Rather, it indicates that one of ordinary skill in the art would have been led to employ the optimum number of flutes or pleats in

the side wall of the filter used (to provide an optimum effective filtering area) in a given coffee filter cartridge, motivated by a desire to obtain various desired strengths of the coffee beverages consistent with the desired tastes of consumers. *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980)(“[D]iscovery of an optimum value of a result effective variable . . . is ordinarily within the skill of the art.”); *In re Aller*, 220 F.2d 454, 456 (CCPA 1955)(“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”). On this record, Appellants have not provided any objective evidence to show that the addition of flutes or pleats known for increasing an effective filtering area in the side wall of the filter used in Sylvan’s coffee filter cartridge is not desirable.

In conclusion, based on the foregoing, we have granted Appellants’ request to the extent that we have reconsidered our Decision, but we deny Appellants’ request to make any change therein.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v).

DENIED

tc

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